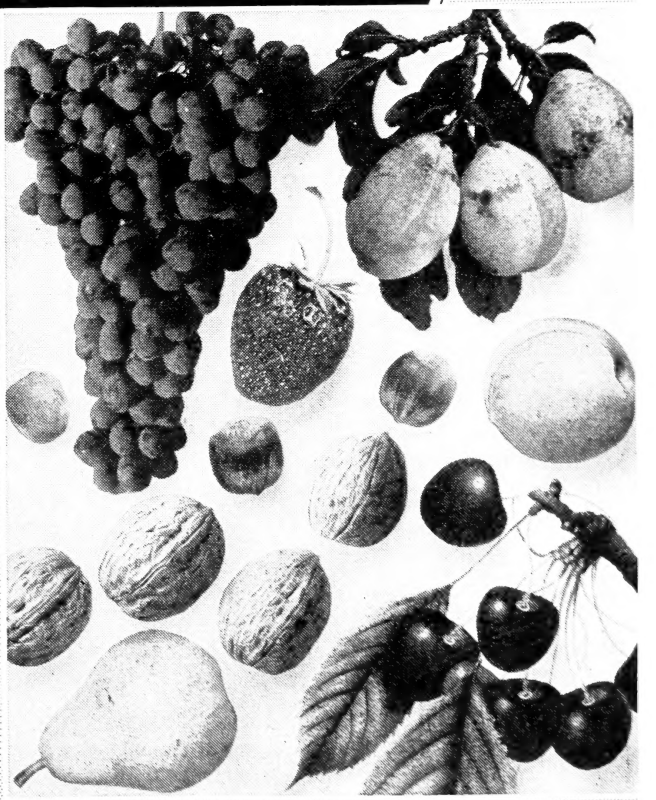
The Home FRUIT GARDEN

in the Pacific Coast States and Arizona



LEAFLET
No. 224

U. S. DEPARTMENT of AGRICULTURE

THE HOME FRUIT GARDEN IN THE PACIFIC COAST STATES AND ARIZONA[1]

The National Nutrition Conference, held in Washington, D. C., November 1941, urged Americans to eat more fruit.

Well-ripened, sound fruits increase the healthfulness, variety, attractiveness, and palatability of meals. Despite the relatively large available supplies of fruit, many families, especially on farms, do not have adequate quantities in the diet. In almost every part of the country certain fruits can be grown successfully in farm or suburban fruit gardens. Fruits needing spraying are not so well suited for home production. By properly selecting the kinds and varieties of fruit for home planting, a succession of fresh fruit of high dessert quality can be available during much of the summer season, and surpluses may be canned, preserved, dried, or in some cases frozen for use during other seasons. Such consumption of home-grown fruits, together with purchases of kinds that cannot be grown successfully, should improve the diet and general health.

Do not let surplus fruit go to waste.

This leaflet lists the best kinds and varieties of fruits and nuts for home planting in the Pacific Coast States and Arizona and gives brief directions for their care. Detailed information can be obtained from the State agricultural extension services or agricultural colleges.

Climatic Districts for Fruits

Summer and winter temperatures, rainfall, and prevalence of diseases and insects are all important in determining the varieties that can be grown in the different parts of the country. Although many fruits are not hardy in parts of this region, some kinds can be grown in almost every home garden. On the map (fig. 1) the States are divided into districts based chiefly on the length of the growing season. In general, the same varieties can be grown throughout a district.

Kinds and Varieties to Plant

Under most conditions in this region the best fruits and nuts for the home garden are (1) grapes, (2) strawberries, (3) Young or Boysen dewberries, (4) red raspberries, (5) filberts or Persian (English) walnuts, (6) plums and prunes, (7) cherries, (8) pears, (9) peaches, (10) apricots, and (11) apples. In restricted locations in California other fruits, including figs, olives, avocados, and citrus fruits, can be grown. Fortunately, in most parts of this region fruit plants are free from many diseases and some insects that attack unsprayed trees in the more humid regions. In commercial apple and pear districts where the codling moth is a serious pest, any apple and pear trees in home gardens require spraying for the control of this insect. In almost every district, however, certain fruits can be grown that do not require spraying and that add greatly to the variety and healthfulness of the diet.

[1] Prepared by the staff of the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, with the collaboration of horticulturists of the States in the region. The varieties suggested herein are based on those recommended by these horticulturists.

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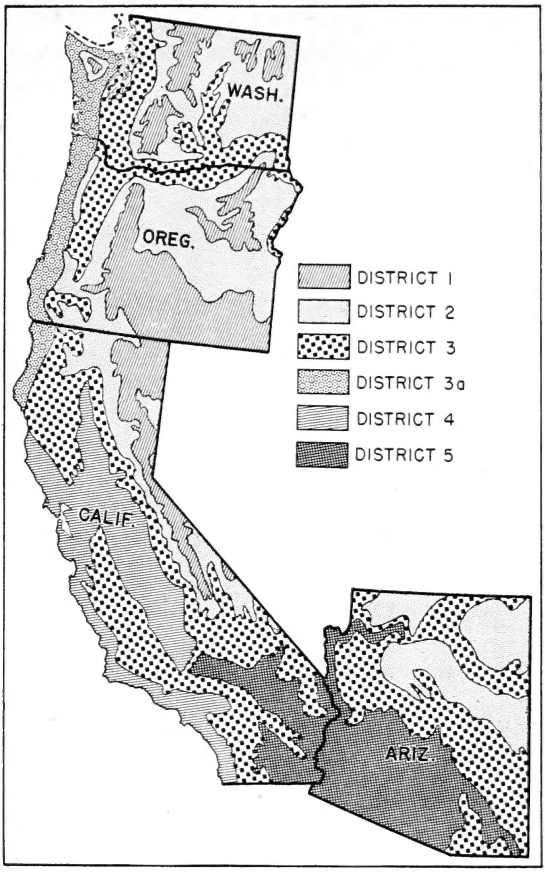

FIGURE 1.—Map of the Pacific Coast States and Arizona. District 1—high mountainous parts of Washington, Oregon, and California, which in general are not suited for fruit growing. District 2—mountain slopes and elevated areas having a growing season of 90 to 150 days; only especially hardy and, in some cases, drought-resistant varieties may be grown. District 3—western and river-valley areas of Washington and Oregon, foothill slopes in California, and parts of Arizona having a growing season of 150 to 240 days, where a considerable variety of fruits and nuts may be grown; irrigation required east of the Cascade Mountains in Washington and Oregon, in southeastern California, and in Mohave, Yavapai, Gila, and Graham Counties, Ariz. District 3a—rather narrow coastal strip of Washington, Oregon, and northwestern California having the same length of growing season as district 3, but summer temperatures too low for the best growth of many fruits. District 4—northern and central river valleys and coastal areas of California having a growing season of more than 240 days; in the interior valleys high summer temperatures prevail, and many fruits and nuts may be grown under irrigation. District 5—arid parts of southern California and Arizona having a growing season of more than 240 days and high summer temperatures, where a considerable range of fruit varieties may be grown successfully under irrigation.

The varieties recommended for medium-sized gardens in the different districts are given in table 1. Some of the varieties suggested

TABLE 1.—*Varieties suggested for medium-sized gardens in representative parts of the districts of figure 1*

DISTRICT 1 (HIGH MOUNTAINOUS AREAS OF WASHINGTON, OREGON, AND EASTERN CALIFORNIA. CLIMATIC CONDITIONS IN GENERAL TOO SEVERE FOR THE GROWING OF FRUITS. IN ESPECIALLY FAVORABLE LOCATIONS SOME VARIETIES LISTED FOR DISTRICT 2 MAY BE TRIED)

DISTRICT 2 (MOUNTAINOUS SLOPES AND ELEVATED AREAS HAVING A GROWING SEASON OF 90 TO 150 DAYS, WHERE CLIMATIC CONDITIONS ARE UNFAVORABLE FOR THE GROWING OF OTHER THAN ESPECIALLY HARDY AND, IN SOME PARTS, DROUGHT-RESISTANT VARIETIES)

Fruit or nut [1]	Variety	Month ripe	Plants	Length of row	Fruit or nut [1]	Variety	Month ripe	Plants	Length of row
			No.	*Ft.*				*No.*	*Ft.*
Strawberry.	Rockhill	June–Oct.	100	150	Sour cherry.	Montmorency	July	1	20
	Gem	do	100	150	Plum	Italian Prune	Sept.	1	20
Raspberry.	Washington	July	50	125	Apple	Yellow Transparent.	July	1	30
	Latham	do	50	125		Gravenstein	Sept.	1	30

DISTRICT 3 (WESTERN AND RIVER-VALLEY AREAS OF WASHINGTON, OREGON, AND NORTHERN CALIFORNIA, THE FOOTHILL SLOPES OF THE CASCADE AND COAST RANGE MOUNTAINS AND SIERRA NEVADA AND PORTIONS OF NORTHERN ARIZONA, WHERE THE GROWING SEASON VARIES FROM 150 TO 240 DAYS AND CLIMATIC CONDITIONS FAVOR THE GROWING OF A CONSIDERABLE RANGE OF FRUIT VARIETIES AND ALSO NUTS)

Grape	Delaware	Aug.–Sept.	2	16	Apple	Yellow Transparent.	July	1	30
	Campbell Early.	Sept.	2	16		Gravenstein	Sept.	1	30
	Niagara	do	2	16		Jonathan	do	1	30
	Concord	do	4	32		Yellow Newtown	Oct.	1	30
Strawberry.	Marshall	May–June.	100	150	Pear	Bartlett	Aug.	1	20
	Rockhill	July–Nov.	100	150		Anjou	Sept.	1	20
Dewberry.	Boysen	June–July.	15	120		Winter Nelis	Oct.	1	20
	Young	do	15	120	Apricot	Blenheim [2]	July	1	20
Blackberry.	Logan	July	10	80	Gooseberry. [3 4]	Oregon	June	5	20
Raspberry.	Cuthbert	June–July.	20	50					
	Taylor	do	20	50	Peach	Rochester	Aug.	2	40
Japanese plum.	Beauty	July	2	40		Elberta	do	2	40
	Santa Rosa	Aug.	2	30	Currant. [3 4]	Fay	June	5	20
European plum.	Italian Prune	Aug.–Sept.	2	40		Perfection	do	5	20
Sour cherry.	Montmorency	June	1	20	Persian walnut.	Franquette	Oct.	2	100
					Filbert	Barcelona	Sept.–Oct.	2	30
Sweet cherry.	Napoleon	do	1	30		Du Chilly	do	2	30
	Black Tartarian	do	1	30					
	Bing	June–July.	1	30					

DISTRICT 3A (COASTAL AREAS OF WASHINGTON, OREGON, AND NORTHERN CALIFORNIA. WARMEST AVAILABLE LOCATIONS, SUCH AS SOUTH AND EAST SLOPES, SHOULD BE SELECTED)

Strawberry.	Marshall	May–June.	100	150	Sour cherry.	Montmorency	June	1	20
	Rockhill	July–Nov.	100	150	Apple	Yellow Transparent.	July	1	30
Dewberry.	Boysen	June–July.	15	120		Gravenstein	Sept.	1	30
	Young	do	15	120		Wealthy	do	1	30
Blackberry.	Logan	July	10	80	Pear	Clapp Favorite	Aug.	1	20
Raspberry.	Cuthbert	June–July.	20	50		Bartlett	do	1	20
	Taylor	do	20	50	Gooseberry. [4]	Oregon	June	5	20
Blueberry.	Cabot	July–Aug.	5	25	Currant [4]	Fay	June	5	20
	Concord	do	5	25		Perfection	do	5	20
	Jersey	do	5	25	Filbert	Barcelona	Sept.–Oct.	2	30
	Rubel	do	5	25		Du Chilly	do	2	30

See footnotes at end of table.

TABLE 1.—*Varieties suggested for medium-sized gardens in representative parts of the districts of figure 1*—Continued

DISTRICT 4 (NORTHERN AND CENTRAL RIVER VALLEYS AND COASTAL AREAS OF CALIFORNIA HAVING A GROWING SEASON OF MORE THAN 240 DAYS; HIGH SUMMER TEMPERATURES IN THE INTERIOR VALLEYS)

Fruit or nut [1]	Variety	Month ripe	Plants	Length of row	Fruit or nut [1]	Variety	Month ripe	Plants	Length of row
			No.	*Ft.*				*No.*	*Ft.*
European grape.	Thompson Seedless.	Aug.–Sept.	2	16	Fig	Mission	June–Aug.	1	30
	Ribier	do	2	16		Kadota	Sept.	1	30
	Muscat of Alexandria.	Sept.	2	16	Guava	Strawberry	Sept.–Nov.	1	10
	Emperor	Sept.–Oct.	2	16	Persimmon.	Hachiya	Oct.–Dec.	1	15
Dewberry.	Young	June	10	80		Fuyu	do	1	15
	Boysen	June–July	10	80	Pomegranate.	Wonderful	Sept.–Nov.	1	15
Strawberry.	Marshall	Apr.–Nov.	50	100	Loquat	Champagne	May–June.	1	15
Raspberry.[5]	Cuthbert	June	20	50	Orange [6]	Washington Navel.	Dec.–Apr.	1	20
Japanese plum.	Beauty	do	1	20	Lemon [6]	Lisbon	Jan.–Dec.	1	20
	Santa Rosa	June–July	1	20		Meyer	do	1	20
European plum.	Yellow Egg	July–Aug.	1	20	Grapefruit.[6]	Marsh	Dec.–May.	1	20
Prune	Agen (French)	Aug.–Sept.	1	20	Tangerine.[5]	Dancy	Nov.–Dec.	1	20
Sweet cherry.	Black Tartarian.	May–June.	1	20	Avocado [6]	Duke	Sept.–Oct.	1	30
	Napoleon	June–July.	1	20	Jujube	Lang	Oct.–Nov.	1	20
Peach	St. John	do	1	20		Li	do	1	20
	Elberta	July	1	20	Feijoa	Coolidge	Sept.–Oct.	1	20
	Paloro (canning cling).	Aug.	1	20		Superba	do	1	20
Pear	Bartlett	July–Aug.	1	20	Almond	Jordanolo	Aug.	1	25
	Winter Nelis	Oct.	1	20		Nonpareil	Aug.–Sept.	1	25
Apricot	Royal	June–July.	1	25	Persian walnut.	Franquette	Sept.–Oct.	1	50
Olive	Mission	Nov.–Dec.	1	20		Payne	do	1	40
	Manzanillo	do	1	20					

DISTRICT 5 (ARID PARTS OF SOUTHERN CALIFORNIA AND ARIZONA HAVING A GROWING SEASON OF MORE THAN 240 DAYS AND HIGH SUMMER TEMPERATURES; IRRIGATION REQUIRED)

European grape.	Thompson Seedless.	July	2	16	Fig	Mission	May–Oct.	1	30
	Muscat of Alexandria.	Aug.	2	16		Kadota	do	1	20
Strawberry.	Missionary	Dec.–Apr.	50	100	Pomegranate.	Wonderful	Aug.–Nov.	1	15
	Klondike	do	50	100	Apricot	Newcastle	May	1	25
Dewberry	Young	June	10	80		Royal	June	1	25
	Boysen	June–July	10	80	Orange [7]	Washington Navel.	Nov.–Jan.	1	20
Japanese plum.	Beauty	June	1	20		Hamlin	Dec.–Mar.	1	20
	Santa Rosa	do	1	20		Valencia	Feb.–May.	1	20
European plum.	Yellow Egg	July–Aug.	1	20	Lemon [7]	Eureka	Sept.–Apr.	1	20
Prune	Agen (French)	Aug.–Sept.	1	20		Lisbon	do	1	20
Peach	Babcock	June	1	20	Grapefruit.[7]	Marsh	Oct.–July	1	20
	Lovell	July	1	20	Olive	Mission	Nov.–Feb.	1	20
	Jewel	do	1	20	Date [7]	Khadrawy	Sept.	1	30
Apricot	Newcastle	May	1	25		Halawy	Oct.	1	30
	Royal	June	1	25		Deglet Noor	Nov.	1	30

[1] 2 or more varieties of apples, pears, sweet cherries, Japanese plums, blueberries, filberts, and almonds should be planted to insure cross-pollination.
[2] Not in western Oregon and Washington.
[3] Oregon and Washington only.
[4] Plant only where quarantine regulations permit.
[5] Near coast only.
[6] In central California plant only if a warm, protected site is available.
[7] Plant only in locations where severe freezing in winter does not occur.

are different from those grown in commercial plantings. Usually more than one variety is listed in order to cover a long season.

In western Oregon the bunch (American) grapes and in California the European grapes are well adapted to the home garden.

Strawberries are also well adapted to gardens in this region. They are the first fruit to ripen, are of fine flavor, and, with the exception of oranges, are the highest in vitamin C content of any fruits that can be grown in this region. Even when frozen, strawberries keep their high vitamin C content for many months. Strawberries, therefore, should be a part of every garden. The everbearing strawberries Rockhill and Gem can be grown in eastern Oregon and Washington where the season is short. Other varieties may be grown in other districts.

The Persian walnut is widely used as a shade tree about the home, especially in western Oregon and California; also, the sweet cherry, so well adapted to this region, is often used for this purpose.

Peaches, plums, prunes, and apricots produce abundantly under irrigation in the warm interior valleys of California and in favorable locations in Oregon and Washington. A few trees of these fruits will supply ample quantities for home use. Most of the stone fruits, apples, and pears are not well adapted to locations in southern California and Arizona where the winters are relatively warm. Apples do well in the home gardens in Washington and Oregon and in the cooler parts of northwestern California and along the foothills, but not in the river valleys of central or southern California.

Planting and Care

Sources of Plants.—Fruits adapted to this region are propagated by commercial nurserymen, who are generally dependable sources of fruit varieties. Names of nurseries can be supplied by the State agricultural extension services.

Location of Planting.—Although it is generally desirable to have the planting near the house and perhaps adjacent to the vegetable garden, this may not be the most favorable location. In general, the planting should not be in a low or frosty area but on moderately elevated land or on a north or northeastern slope that will provide satisfactory air drainage.

Size of Planting.—The size of the planting will vary with the space available. In some locations there may be space for only a few grapevines on an arbor or fence, a few fruit trees around the buildings, or a row or two of berries by a fence. On other places the size of the planting is determined by the needs of the family and by the kinds of fruit that can be grown. Most small gardens (10 by 50 feet to 30 by 50 feet) should consist mostly of berries and grapes. A half-acre garden that includes tree fruits and nuts and will furnish fruit in season for a large family is diagrammed in figure 2 for western Washington or western Oregon. For other districts suitable fruits (table 1) may be substituted.

When and How to Plant.—In western Oregon, western Washington, California, and Arizona trees should be planted in late fall; in eastern Oregon and Washington they should be planted as early in the spring as it is possible to prepare the soil. The ground should be prepared as thoroughly as for a vegetable garden. It is important that the plants be entirely dormant, with no buds starting, at time of planting. Also, the roots should not be allowed to dry out. Berries and grapes should be set at the same depth as they grew in the nursery.

The tree fruits and nuts should be set slightly deeper. The roots should be spread out when the plants are set. When the holes are dug the topsoil and subsoil are separated. The topsoil is placed around the roots of the tree in the hole, and the subsoil is used last to fill up the rest of the hole. The soil should be thoroughly firmed about the roots to prevent drying out and to help hold the tree in position.

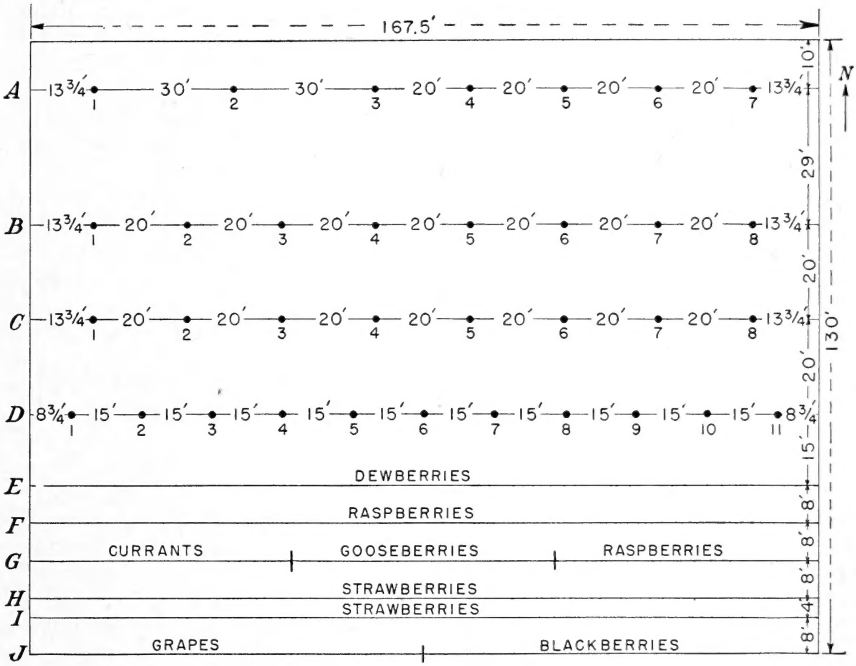

FIGURE 2.—Suggested arrangement for a half-acre fruit garden in western Oregon or western Washington. Row *A*—Nos. 1 to 3, apples; Nos. 4 to 7, pears. Row *B*—Nos. 1 to 4, cherries; Nos. 5 to 8, peaches. Row *C*—Nos. 1 to 6, plums; Nos. 7 and 8, apricots. Row *D*—filberts. Row *E*—half row each of Young and Boysen dewberries (8 feet apart). Row *F*—Cuthbert raspberry (56 plants, 3 feet apart). Row *G*—one-third row each of Perfection currant (4 feet apart), Oregon gooseberry (4 feet apart), and Taylor raspberry (2½ feet apart). Row *H*—Marshall strawberry (112 plants). Row *I*—Rockhill strawberry (112 plants). Row *J*—half a row each of grapes and Logan blackberry (8 feet apart). Fruit trees should be placed on the north side, if possible, to avoid shading of small fruits.

PRUNING BEFORE PLANTING.—All fully developed leaves should be picked off before the strawberries are planted. The canes of raspberries should be cut back to 6 inches at time of planting. Grapevines are usually cut back, leaving only one or two buds. If fruit trees obtained from the nursery are unbranched whips, they should be headed back to a height of 15 to 20 inches. If they have several good-sized branches well spaced along the trunk, three or four may be left. The branches should be spaced about a foot apart along the trunk and should point in different directions.

CULTIVATION.—The cultivation of the home fruit garden is similar to that of the vegetable garden. Cultivation should begin as soon as

the ground is dry enough and continue as needed until September or October. Under most conditions the same methods of maintaining the fertility of the soil that are followed in a vegetable garden are successful with fruit. Where stable manure is available, its liberal use generally gives excellent results.

IRRIGATION.—Regular irrigation is necessary in most of this region, except in western Oregon and Washington. It is especially needed by the small fruits. Where winter rains have not filled the soil, a good irrigation wetting in March, April, or June, and then at monthly intervals until September, should be given. On sandy soils the irrigations must be more frequent than on heavy soils.

PRUNING AFTER THE FIRST YEAR.—To many inexperienced growers the question of how to prune trees and bushes appears to be very complicated. If certain basic principles are kept in mind, however, it is possible for even the inexperienced grower to do a satisfactory job of pruning. The purpose of pruning is to develop the tree or bush so that it will have maximum strength to carry a load of fruit and maximum bearing capacity. A safe rule in pruning trees, particularly young trees up to bearing age, is to prune them as little as will accomplish this specific purpose. Cross branches and suckers should be removed and broken or dying limbs cut out. Young trees of most fruits require little pruning before they come into bearing. Pruning of fruit trees in general should be done during the dormant season, preferably in the spring after danger of severe winter freezing is past but before growth has started.

If the growth of grapevines is rather weak during the first season, it is advisable to cut the vine back at the end of the first growing season to one or two buds and to train up a strong trunk during the second growing season. If the vine is to be trained to a fence or a two-wire trellis, it should be tied to a stake and carried upright until it reaches the top wire. At that point it should be pinched off and two laterals led out, one in each direction, along the wire. During the second season lateral canes will grow from all the buds along the trunk. Two of these at the height of the first wire above the ground should be selected and tied to that wire to develop fruiting wood. The other branches along the trunk should be rubbed off or pinched back during the growing season.

In most cases the vines, if properly cared for, will begin to bear fruit the third year after planting and should continue to produce a satisfactory crop for many years thereafter.

Pruning should be done while the vines are in a dormant condition. It is important to note that fruit is borne on shoots from the canes of the previous season's growth. In pruning, therefore, enough new wood should be saved to provide for the next summer's crop and the rest removed. With healthy, vigorous vines, 50 to 60 buds will produce as much fruit as the vine can mature properly. More wood may be left on vines for home production, provided sufficient space is available for the vine to develop. With vigorous vines, the leaving of more wood may result in a greater total quantity of fruit, but the individual bunches may be inferior in size and the fruit of poorer quality.

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